Application No.: 09/835,097

Page 2

## **IN THE CLAIMS**:

Please add new claims 12-17 so that the claims read as follows:

Claim 1 (Original): A speaker apparatus comprising:

a magnetic circuit having a magnetic gap;

a voice coil located in the magnetic gap;

a voice coil bobbin having the voice coil wound thereon;

a diaphragm mounted on the voice coil bobbin;

a hollow portion defined in that portion of the magnetic circuit which is surrounded by the voice coil, the hollow portion extending in a longitudinal direction of the voice coil bobbin;

an elongated rod inserted in the hollow portion of the magnetic circuit and fixed to the

diaphragm; and

at least one support member located at a predetermined position in the hollow portion of

the magnetic circuit for movably supporting the elongated rod in the hollow portion of the

magnetic circuit such that the elongated rod is only allowed to oscillate in a regular oscillating

direction of the diaphragm.

Claim 2 (Original): The speaker apparatus according to claim 1, wherein the support

member is made from a material of smaller friction coefficient than that portion of the magnetic

circuit which surrounds the hollow portion.

Application No.: 09/835,097

Page 3

Claim 3 (Original): The speaker apparatus according to claim 2, wherein the support member is a ceramic.

Claim 4 (Original): The speaker apparatus according to claim 2, wherein the support member is a bearing.

Claim 5 (Original): The speaker apparatus according to claim 1, wherein the diaphragm has an annular or conical shape, and the voice coil bobbin supports an inner periphery of the diaphragm.

Claim 6 (Original): The speaker apparatus according to claim 1, wherein the diaphragm has an annular or conical shape, and the elongated rod supports an inner periphery of the diaphragm.

Claim 7 (Original): The speaker apparatus according to claim 1, wherein the diaphragm is planar.

Claim 8 (Original): The speaker apparatus according to claim 1 further including a frame connected to the magnetic circuit, and wherein an outer periphery of the diaphragm is mounted on the frame.

Application No.: 09/835,097

Page 4

Claim 9 (Original): The speaker apparatus according to claim 1, wherein the elongated rod and the diaphragm are fixed to each other via a coupling element.

Claim 10 (Original): The speaker apparatus according to claim 1, wherein the respective support member is made from a heat-resistive material having a softening point higher than that portion of the magnetic circuit which surrounds the hollow portion.

Claim 11 (Original): The speaker apparatus according to claim 1, wherein the elongated rod is made from a heat-resistive material having a softening point higher than that portion of the magnetic circuit which surrounds the hollow portion.

Claim 12 (New): A speaker apparatus comprising:

a magnetic circuit having a magnetic gap;

a voice coil located in the magnetic gap;

a voice coil bobbin having the voice coil wound thereon, the voice coil bobbin having a longitudinal direction;

a diaphragm mounted on the voice coil bobbin;

a hollow portion formed in that portion of the magnetic circuit which is surrounded by the voice coil, the hollow portion extending in the longitudinal direction of the voice coil bobbin; and

Application No.: 09/835,097

Page 5

a rod received in the hollow portion of the magnetic circuit such that the rod can move in the longitudinal direction of the voice coil bobbin, the rod being fixed to the diaphragm to support the diaphragm.

Claim 13 (New): A speaker apparatus comprising:

a yoke having a longitudinal direction;

a magnet mounted on the yoke such that the yoke and the magnet in combination form a magnetic circuit, the magnetic circuit having a magnetic gap;

a voice coil located in the magnetic gap;

a voice coil bobbin having the voice coil wound thereon;

a diaphragm mounted on the voice coil bobbin;

a hollow portion formed in the yoke such that the hollow portion extends in the longitudinal direction of the yoke; and

a rod received in the hollow portion of the yoke such that the rod can move in the hollow portion, the rod being fixed to the diaphragm.

Claim 14 (New): The speaker apparatus according to claim 13 further comprising at least one support member located in the hollow portion for movably supporting the rod in the hollow portion.



Application No.: 09/835,097

Page 6

Claim 15 (New): The speaker apparatus according to claim 14, wherein each of the at least one support member is a bearing.

K

Claim 16 (New): The speaker apparatus according to claim 14, wherein each of the at least one support member is made from a ceramic.

Claim 17 (New): The speaker apparatus according to claim 14, wherein the support member is a bearing.